Correspondence.

TENDERS FOR BUILDINGS.—SCHEDULE OF PRICES.

Sir,—At a time like the present, when the spirit of competition is abroad, and the existing practices of builders appear to militate against the great body of that community, I am desirous of proposing the revival, in some degree, of a practice which has now become nearly extinct. I allude to the practice of a schedule of prices being furnished to contractors, instead of the present uncertain and pernicious practice of estimating.

The benefits arising from this system appear, in my mind, to be of very great importance, inasmuch as there is a possibility of carrying it, in detail, to the advantage of all connected with the science of building. I would refer to the satisfaction a schedule of prices affords in the working of the Government establishments, such as the Ordnance, in which department all the works are executed at the rates and agreeably with the descriptions given in the said document, subject to percentage over or under, as the case may be.

It may be argued, that in private practice this regulation could not be effected, upon the principle that no individual about to commence building would do so without first ascertaining the cost. We cannot surely find fault upon that account, but I think that this could also be done in a manner to give satisfaction.

I shall now enter into the details of my plan by taking a case in this way. A gentleman requires a mansion to be erected. His first step is to engage an architect to furnish the designs for the work; they are approved of, and the individual is desirous of ascertaining the expense.

A frequent mode of acquiring this information is by advertisment, inviting builders to tender for the erection of such works. Here the spirit of competition makes its way, and instead of allowing a reasonable profit for the outlay and anxiety of the builder, we find, in most cases, quite the contrary result. My proposal is, that the architect having his designs approved of, should be empowered to hand them over to an experienced surveyor, for the purpose of ascertaining as nearly as possible, by estimate, the expense of the proposed work.

This would be of course for the satisfaction of the individual who is about to make an outlay.

The description of work required in the erection of such a building can be ascertained by the architect thereof; a schedule of such work, with fair prices thereto attached, might be thence framed, a general specification and the terms of the proposed contract being attached. Thus contractors being invited to tender would, on examination of those prices, be enabled to state at how much per cent. above or below them they were willing to execute the work.

It would be desirable that the works should be measured as they proceed, so that at the end of each quarter or half year, the contractor's bills might be prepared for payment.

In order to the proper execution of the works, it is suggested that intelligent individuals be selected to fill the situation of clerks of works, whose duties being well known, I shall not stop here to describe.

Such is the nature of the plan I propose. The objects to be gained by it are these:—

1st. The employer fur whom the work is being executed can ascertain actually the amount of work performed as it proceeds.

2nd. By the employment of a responsible individual as a clerk of works, he is assured the work is properly executed.

3rd. The architect who has designed and superintended the works from time to time, can extend his engagements, having the assistance of a resident clerk of works.

4th. By this means a source of employment would be opened for a large number of young men of talent, who, from circumstances, instead of occupying the position to which they of right belong, are obliged to rest contented as clerks in builders' establishments. I allude to the young surveyors who, for want of interest or connection, are unable to follow their profession.

To the existing surveyors I see no disadvantage in my plan, as the field for the extension of their labours would be increased.

It may be argued that by this arrangement spurious surveyors might get into the profession, but I see no difficulty in setting that question at rest.

I would suggest that the body of respectable surveyors form themselves into a society for the protection of their profession, and that they procure power, such as that enjoyed by the Royal College of Surgeons, or other bodies similarly constituted, that candidates be examined in open court, touching their abilities, and be not allowed to practice as surveyors unless found capable of bearing such examination.

To builders I would recommend the introduction of this practice in consequence of the satisfactory results to be derived from it. The expense of the engagement of a competent surveyor would be but trifling compared with the present hazardous system of estimating; which, however great the perfection to which it has been brought, can afford no security, in the event of circumstances occurring over which neither the architect in making his specification, nor the surveyor in framing his estimate could have any control.

Builders should form themselves into a society for the promotion of such a desirable object, the interests and respectability of their business require it.

I leave these few suggestions with you, and must apologize for the length to which I have extended this letter.

I am, Sir, yours, &c.

Brecon, May 27th, 1844. STABILITAS.

PETRALOGY.

Sir,—In reading an article in last week's Builder entitled, "Petralogy, or the Knowledge of Rocks and Stones," I was surprised to find granite described as of sedimentary origin, and the idea of its having been produced by the agency of fire, or "formed of matter once in a state of fusion" discarded, as being an unphilosophical notion. Now I would ask the writer how he accounts for granite being found as at Gleo Tilt, in Scotland, described by Mac Culloch; where it is found intersecting different strata, and occasionally "intruding itself in tortuous veins into the beds of clay slate and lime-stone." Mac Culloch also describes another instance, "in the same district, where the granite sends forth so many veins, as to reticulate the lime-stone and schist, the veins diminishing towards their termination to the thickness of a leaf of paper or a thread." There are also numerous other junctions of a similar nature, where, according to Lyell and other eminent geologists, "large masses of granite are found to send forth dikes and veins into the contiguous strata, very much in the same way as lava and volcanic matter penetrate aqueous deposits."

If, therefore, granite be of sedimentary origin and deposited by water, I should like to see how these are to be accounted for in a satisfactory manner. It appears to me that some subterranean and internal power must have been employed to have effected such a complicated arrangement.

The writer also says that "Geologists inform us that granite is primary rock,"—now it has been discovered of late years that granite has been produced or formed at different geological periods, some of which are comparatively modern, therefore, the term primary or primitive cannot be at all applied to it. For instance the granite of Dartmoor, in Devonshire, which was formerly supposed to be a primary or primitive rock; has been satisfactorily ascertained to be newer than coal.

I am, Sir, your obedient servant,

May 21, 1844. J. K. C.—B.A.A.D.

THE ATMOSPHERIC RAILWAY.

Sir,—In your valuable journal several allusions have been made to Messrs. Clegg and Samuda as the inventors of the Atmospheric Railway. Allow me, however, to state that these parties have not the slightest claim to the invention, and that they themselves disclaim it. They rest their claim entirely upon a valve, which valve is to be found in my specifications. Their patent was taken out in 1839, my patents are dated in 1834 and 1836. The Dublin and Dalkey line has been constructed in conformity with my specifications; and though some important details are omitted, nothing has been done which is not in direct violation of my legal rights; consequently, it becomes my duty, through our journal, which has so great a circulation, among practical engineers and builders, to state that Messrs. Clegg and Samuda will not be permitted to continue in their infringement of my rights, and that any parties connected with them will be liable with them as parties to the infringement.

In order that the public may be on their guard, and that these assertions may be received with their due weight, I beg to refer to my specifications, and also to the following extract from a letter from Mr. Clegg:—

"April, 1838.

"I must be informed of all particulars. Your *first* patent, as it appears to me, is of much more consequence than your *last* for improvements. Your patents are of that importance that nothing must be left to conjecture.

(Signed) "SAMUEL CLEGG."

In conclusion, permit me to state that a true history of the Atmospheric Railway will soon be placed before the public, containing documentary evidences; a portion of them under the hands of Messrs. Clegg and Samuda, which will astonish those who have witnessed the proceedings of these parties, who seem to flatter themselves that such pretended histories as that in the "British and Foreign Quarterly Review" will save them from the opprobrium which, sooner of later, overtake all men who endeavour to impose upon the credulity of the public.—I am, Sir, with sentiments of respect, your obedient servant,

HENRY PINKUS.

Maddox-street, May 30, 1841.

WINDOW LIGHTS.

Sir,—I should feel obliged by your stating in your next number what restrictions exist as regards building walls near windows, the light of which may be partially obstructed by such walls, or in what work information on this point may be found?

Yours obediently

May 28th, 1844. GNIEK.

[We have repeatedly answered questions much the same as this. No window-light rightfully held must in any way be injured by a neighbour: twenty years' possession gives the right of maintaining unimpaired a right of the kind. If such a window be through a party-wall, by the present Metropolitan Building-Act it is necessarily sacrificed upon rebuilding such wall, for by that Act no holes are allowed in party-walls.—ED.]

Miscellanea.

THE TRIGONOMETRICAL SURVEY.—SPIRE OF TRAXTAN CHURCH.—One of the points selected for the purposes of the trigonometrical survey of England, now in active progress, under the superintendence of the officers of the Royal Engineers (Sappers and Miners), is the spire of Traxted Church, in this county. The church is one of considerable beauty, of a late period of Gothic architecture; is built of rubble, with stone dressings, the rubble being coated with cement, so as to give the whole an appearance of stone. It consists of a nave, with a clere story, aisles, chancel, transepts (north and south), porches, and a tower surmounted by an elegant spire, nearly 200 feet high. Around the spire is erected the scaffolding supporting the platform for the purposes of the survey, presenting a singular aspect. The construction is firm and ingenious, every advantage being taken of the condition of the spire. From each of the lowest windows are seen projecting a couple of planks laid edgewise, well secured at their ends at about eight or nine inches apart, blocked together, and forming a case for the reception of the main scaffold poles. The plan of the spire is octangular, the windows being in every other face; and, consequently, the plan of the scaffolding is square. The projecting ends of the planks are further supported by struts from the roof of the tower; horizontal ties are fixed upon the projecting planks, over the flying-buttresses, and between the finials of these and the spire. The main poles are received in the before-mentioned cases, formed by the projecting planks, and are braced by horizontal and diagonal ties, and firmly secured to the spire, the whole height to the platform. The platform is hexagonal, and is supported by the main poles and extra struts from these. From the lowest windows of the spire the secret to